

Caribbean Regional Technical Workshop on CCRIF Models

Session 10: Using WeMAp

With financial support from the European Union in the framework of the Caribbean Regional Resilience Building Facility, managed by the Global Facility for Disaster Reduction and Recovery (GFDRR)

CARIBBEAN REGIONAL RESILIENCE BUILDING FACILITY





WeMAp wemap.ccrif.org

The Web Monitoring Application (WeMAp) allows CCRIF members and other users to monitor earthquakes as well as the development of potentially damaging heavy rainfall, tropical cyclones, and earthquakes and analyze their intensity and assess their impact, as well as check whether an active insurance policy with CCRIF is likely to be triggered.

It has 4 components: the Real-Time Forecasting System (RTFS) for tropical cyclones (an update of the original CCRIF RTFS) and Monitoring Tools for tropical cyclones, earthquakes and rain events (including but not limited to cyclonic events).

CCRIF's Web Monitoring Application - WeMAp

Purpose of WeMAp

WeMAp allows the user to easily access information about hazards related to tropical cyclones and rainfall and their impacts.

While some of the information displayed by WeMAp is publicly available and issued by third-party agencies (eg NOAA), WeMAp displays exposure and hazard maps generated by CCRIF's XSR and SPHERA models.

Replaces and expands on CCRIF's Real-Time Forecasting System

WeMAp Components

Tropical Cyclone Monitoring Tool*

- for wind and storm surge events induced by tropical cyclones
- Tropical Cyclone track produced by NOAA
- wind fields produced by the SPHERA model for the TC peril
- storm surge maps produced by the SPHERA models for the TC peril

Excess Rainfall Monitoring Tool*

- including but not limited to cyclonic events
- daily precipitation at 1km and 8km resolutions from CMORPH, WRF5, WRF7
- aggregated precipitation at 1km resolution

Earthquake Monitoring Tool*

• magnitude, location, time of event from USGS

Real-Time Forecasting System (RTFS)

- for tropical cyclones
- real-time estimates of the expected hazard levels and impacts on population and infrastructure

*The TC, XSR, EQ tools monitor actual data, while the RTFS shows the expected future development of active tropical cyclones.

Use of WeMAp

WeMAp outputs include maps and reports. Information from WeMAp can be used for:

CONTINGENCY PLANNING

- Obtain a preview of what might happen if a given storm continues along its projected path, and activate appropriate contingency plans based on this insight
- Update country plans as needed with new information from latest forecast



SHELTER MANAGEMENT

- Identify impact areas and shelter locations to support shelter allocation decisions
- Identify potential damage to shelters and plan for alternatives



EMERGENCY INTERVENTION

• Identify areas where population is at risk and issue warnings, plan for assistance

Use of WeMAp

370 users from the Caribbean and Central America currently have WeMAp accounts

CIMH

CIMH uses the outputs for:

- Providing input into the Caribbean Dewetra Platform
- Briefing the CDEMA country preparedness team(s) each time a storm is approaching one or more of the CDEMA member states. This involves individual briefings with countries and the provision of briefs on approaching events which incorporate information from the WeMAp tool

National Meteorological Offices

National meteorology officers can use WeMAp to understand particular events and raise public awareness about an approaching system in order to aid preparedness.

WeMap

CCRIF's platform for real-time hazard and risk monitoring

WEBSITE: wemap.ccrif.org USERNAME: Guest PASSWORD: CCRIFRW2023

